

Bioenvironmental and Structural Systems Lab

Fan Description Form

Project Number: 95283 Series/Test: /

Test Date: October 24, 1995 File Name: _____

Fan

Make: Acme

Model #: BDR48J-A

Serial #: -

Manufacturer: Acme

Blade Size: 48"

Orifice Dia.: 48.5"

Blade

Number: 4

Shape: propeller

Material: Galvanized steel

Pitch: -

Clearance: .3"

Hub Diameter: -

Shutter

Material: aluminum

Number Doors: 13 per row

Number Rows: 2

Door Length: 25.3"

Location: intake

Other Attachments

Motor

Make: A.O Smith

Model #: K56A40B83

Serial #: -

H.P.: 1

Amps: 11.0/5.5

Volts: 115/208-230

RPM: 1725/1425

S.F.: 1.30

Drive Pulley Dia.: AK30

Axle Pulley Dia.: AK114
11" o.d.

Center Spacing: -

Housing

Material: galv. steel

Intake Area: 52"x51.6"

Discharge Area: 51.5"x51.5"

Depth: $\frac{35.5'' \text{ top}}{20.3'' \text{ bottom}}$

Guards

Description: welded wire

Spacing: 1" x 2"

Location: exhaust

TEST RESULTS

ACME BDR48J-A

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 95283	0.00	469	21500	19.2
Fan description:	0.05	469	20400	17.7
48" belt drive, 1 hp A.O. Smith K56A40B83	0.10	469	19300	16.5
motor, galvanized steel slant housing,	0.15	469	18100	15.2
aluminum shutter and guard	0.20	468	16700	13.9
	0.25	468	15100	12.3
	0.30	465	13000	10.2
